State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-721 Relating to Certification of New Motor Vehicles

GENERAL MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1996 model-year General Motors Corporation exhaust emission control systems are certified as described below for light-duty trucks:

Fuel Type: Gasoline

Engine Family: TGM4.32PGKEL <u>Displacement</u>: 4.3 Liters (262 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Exhaust Gas Recirculation
Three Way Catalytic Converter
Dual Heated Oxygen Sensors
Heated Oxygen Sensors (Two)
Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards for this engine family in grams per mile are:

Loaded Vehicle Weight(lbs.)	Miles	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	Carbon <u>Monoxide (20⁰F)</u>
3751-5750	50,000	0.32	4.4	0.7	12.5
	100,000	0.40	5.5	0.97	n/a

The certification exhaust emission values for this engine family in grams per mile are:

Loaded Vehicle Weight(lbs.)	<u>Miles</u>	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	Carbon <u>Monoxide (20⁰F)</u>
3751-5750	50,000	0.15	1.6	0.5	3.5
	100,000	0.20	2.1	0.58	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this $13^{1/2}$ day of July 1995.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES

Example, Pattern A: CC10703+E62 Example, Pattern B: 1UM05

Digit 1 = Marketing Division

 $\begin{array}{lll} \underline{\text{Pattern A}} & \underline{\text{Pattern B}} \\ C = \text{Chevrolet} & 1 = \text{Chevrolet} \\ T = \text{GMC} & 2 = \text{Pontiac} \\ H = \text{Oldsmobile} & 3 = \text{Oldsmobile} \end{array}$

Note: Digit 1 is not used for Pattern A models on engine family pages or

California Supplemental Data Sheets.

<u> Digit 2 = Chassis Type (all)</u>

U = Conventional 4x2 Front Wheel Drive
C. S. M = Conventional 4x2 Rear Wheel Drive
G = Forward Control 4x2 Rear Wheel Drive

K, T, L = Conventional 4x4 Four Wheel Drive, All Wheel Drive

Digit 3 = Series/GVWR

3 = 30.35.3500/7100-14500

Digits 4 & 5

06 = S/T Short Box 06 = Passenger (Lumina APV, Trans 07 = C/K Short Box Sport, Silhouette)

07 = C/K Short Box 08 = S/T Long Box & Cab-Chassis 09 = C/K Long Box, Suburban,

M/L Short Body 10 = G Short Wheelbase, M/L Long Body

13 = G Long Wheelbase

Digits 6 & 7 = Body/Cab Codes (Pattern A Only)

03 = Conventional Cab, Cab-Chassis

05 = Cargo Van

06 = Passenger Van, 4 Door Special Purpose Vehicle

16 = 2 Door Special Purpose Vehicle

53 = Extended Cab

Pickup Body Codes (Optional, Used with Pattern A Only)

+E62 = Stepside, Fenderside +E63 = Fleetside, Wideside

+ZW9 = Cab-Chassis

ISSUED: ML-TP040 REVISED:

MANUFACTURER: GENERAL MOTORS CORPORATION	ENGINE FAMILY: TGM4.	32PGKEL
EVAD STD: SOK X USFFULLIFE WITH R/L	EVAPORATIVE FAMILY:	10MI 089ATMBA
AVUICTO, TIED O TIER-1 X TIEV LEV	ULEV ZEV: EPA TIER	-U
VEH CLASS(ES): PC LDT1 LDT2_X MDV1_	MDV2 MDV3 M	DV4 MDV5
CINCLE CERT SID FOR MULTI-CLASS ENGINE FAMILY:		
EVU CERT EUEL (S): INDO PH2 X DIESEL: 13	3 CCR 2282 OR 40 CFR 8	6.113-90
OD _Q/ M85 CNG	LPG UTHER (SPECIFY)_	
CHEL TYPE(S): DEDICATED X FLEX-FUEL DUAL	-FUEL GASOLINE <u>X</u> D	IESEL M85
CNG ING IPG OTHER (S'	PECIFY)	
LIVEDTO. TYPE A R C APU CYCLE (E.G.	., OTTO, DIESEL, TURBINE):	NA
ENCINE CONFIGURATION: V6 DISPLACEMEN	T: 4.3 LITERS 262 CUE	SIC IMCUES
ENGINE: FRONT X MID REAR DRIV	E: FWD RWD_X_ 4WD-F	1 4WU-F1
EXHAUST EMISSION CONTROL SYSTEM & COMPONENTS:	LEGR, TWC, 2HO2S-HO2S(2), S	SFI
RLHP/DPA: SECTION 08.13.02.00		
	IGN SYSTEM EGR	
(LOC) TRANS TYPE: EQUIV. ENG VEH MODELS A-AUTO TEST CODE (SEE PAGE 1) M-MAN WEIGHT (NW)	(PCME/PROM) SYSTEM	M CATALYST
ENG VEH MODELS A-AUTO TEST CODE (SEE PAGE 1) M-MAN WEIGHT	PART NO./CALIB PART NO	D. PART NO.
(NW) 2,2M CM11005 A4 4000		88. 25153034
TM11005 4250	16187577PB-OPER 170963 16187676-ENG	09
M11006 4/50	16187889,	
	16187890, 16215601-TRANS	
2A,2N	16200785/ 16227245PF-OPER	
	16227409-ENG	
	16227559. 16227560.	
	16227561-TRANS	
	16235505PH-OPER	
2B.2P	16232339-ENG	
CARLINE NAME	CARLINE CODE	
CHEV ASTRO EXTENDED PASSENGER VAN 2WD CHEV ASTRO EXTENDED CARGO VAN 2WD	55060 55045	
GMC SAFARI XT FXTENDED CARGO VAN 2WU	80035	
GMC SAFARI XT EXTENDED PASSENGER VAN 2WD	80050	

ISSUED: ML-TP040 REVISED: ML-TP073, ML-TR004, ML-TR031, ML-TR053, ML-TR066

MANUFACTURER: GENERAL MOTORS CORPORATION	ENGINE FAMILY	TGM4.32PG	KEL
EVAP STD: 50K_X USEFUL LIFE WITH R/L	EVAPORATIVE FA	AMILY: TGM1	089AYMBA
EXH STD: TIER-0 TIER-1_X TLEV LEV	ULEV ZEV;	PA TIER-0_	TIER-1 <u>_X</u>
VEH CLASS(ES): PCLDT1LDT2_X_ MDV1	MDV2 MDV	3 MDV4_	MDV5
SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY:			
EXH CERT FUEL(S): INDO PH2_X_ DIESEL: 1	3 CCR 2282 OR	40 CFR 86.11	.3-90
OR -94 M85 CNG	LPG OTHER (S	PECIFY)	
FUEL TYPE(S): DEDICATED X FLEX-FUEL DUAL	FUEL GASOLI	NE <u>X</u> DIESE	<u></u> M85
CNG LNG LPG OTHER (S	SPECIFY)		
HYRRID: TYPE A B C APU CYCLE (E.G	G., OTTO, DIESEL. TU	RBINE): NA	
ENGINE CONFIGURATION: V6 DISPLACEMEN	NT: 4.3 LITERS	262 CORIC	INCHE2
FNGINE FRONT X MID REAR DRIV	/E: FWD RWD <u>X</u>	4WD-F1	_ 4WD-P1
EXHAUST EMISSION CONTROL SYSTEM & COMPONENTS:	LEGR, TWC, 2HO2S-HC	2S(2), SFI	
RLHP/DPA: SECTION 08.13.02.00			
REHP/DPA. SECTION 08.13.02.00	TON CVCTEM	FGD	
(LOC) TRANS TYPE: EQUIV. ENG VEH MODELS A-AUTO TEST	(PCME/PROM)	SYSTEM	CATALYST
CODE (SEE PAGE 1) M-MAN WEIGHT	PART NO./CALIB	<u>PART NO.</u>	<u>PART NO.</u>
(NW) 2,2M CM11005 A4 4000	16200785/	17096188.	25153034
TM11005 4250	16187577PB-OPER 16187676-ENG	1/096309	
M11006 4/50	16187889.		
	16187890. 16215601-TRANS		
2A.2N	16200785/ 16227245PH-OPER		
	16227409-ENG		
	16227559, 16227560,		
	16227561-TRANS		
2B,2P	16235505PH-0PER		
	16232339-ENG		
	0.D. THE .000E		
CARLINE NAME CHEV ASTRO EXTENDED PASSENGER VAN 2WD	CARLINE CODE 55060		
CHEV ASTRO EXTENDED CARGO VAN 2WD	55045		
GMC SAFARI XT EXTENDED CARGO VAN 2WD GMC SAFARI XT EXTENDED PASSENGER VAN 2WD	80035 80050		
MING OUT VIEW EVICATION LUGGERGES THE TANK			

ISSUED: ML-TP040 REVISED: ML-TP073, ML-TR004, ML-TR031, ML-TR053, ML-TR066

MANUFACTI	URER: GENERAL	MOTORS CORPORATI	ON	ENGINE FAMILY	TGM4.32PG	KEL
-√AP STD	: 50K X USE	FUL LIFE WITH R/	'L	EVAPORATIVE FA	AMILY: TGM1	089AYMBA
EXH STD:	TIER-0 TI	ER-1_X_ TLEV	LEV	ULEV ZEV:	EPA TIER-0	_ TIER-1 <u>X</u>
VEH CLAS	S(ES): PC	LDT1 LDT2_>	<u> MDV1_</u>	MDV2 MDV3	3 MDV4_	MDV5
SINGLE C	ERT STD FOR MUL	TI-CLASS ENGINE	FAMILY:			
EXH CERT	FUEL(S): INDO	PH2 <u>X</u> [DIESEL: 13	CCR 2282 OR 4	40 CFR 86.11	.3-90
	OR -94 M85 CNG LPG OTHER (SPECIFY) FUEL TYPE(S): DEDICATED_X FLEX-FUEL DUAL-FUEL GASOLINE_X DIESEL M85					
FUEL TYP	E(S): DEDICATE	D <u>X</u> FLEX-FUEL	DUAL-	FUEL GASOLI	NE <u>X</u> DIESE	L M85
	CNG	LNG LPG	OTHER (SP	ECIFY)	DOTALEY AIA	
HYBRID:	TYPE A B	_ C APU C	CLE (E.G.	, OTTO, DIESEL, TU	KRINF): NA	ואורטבכ
ENGINE C	ONFIGURATION:	V6 DIS	SPLACEMENT	: 4.3 LITERS	AUD_FT	.NCDL3 AMD+PT
ENGINE:	FRONT_X_ MIL) REAR	DKIVE	: FWD RWD_X	20(2) SFT	
EXHAUST	EMISSION CONTRO)L SYSTEM & COMPO	JINENIS: L	EGR, TWC, 2HO2S-HO	23(2), Ji I	
RLHP/DPA	: SECTION 08.1	.3.02.00				
(LOC)		TRANS TYPE:	EQUIV.	IGN SYSTEM (PCME/PROM)	EGR	CATAL VCT
	VEH MODELS (SEE PAGE 1)	A-AUTO <u>M-MAN</u>	WEIGHT	PART NO./CALIB	PART NO.	PART NO.
(NW)		A4	4000			
°C,2Q	CM11005 TM11005	A4	4250	16237015PJ-OPER	17096309	
	M11006		4750	16232339-ENG 16227582.		
				16227583,		
				16227586-TRANS	•	
2D.2R				16232385-ENG		
6.6M	M11005		4250			
	M11006		4750	1623915PG-OPER 16227517-ENG.		
	V			16227582.		
				16227583, 16227586-TRANS		
		N. A. B. Jan		CADLINE CODE		
CHEV AS	<u>CARLINE</u> TRO EXTENDED PA	SSENGER VAN 2WD		CARLINE CODE 55060		
CHEV AS	TRO EXTENDED CA	RGO VAN 2WD		55045 80035		
GMC SAF	ARI XT EXTENDED ARI XT EXTENDED	PASSENGER VAN 2	2WD	80050		

'SSUED: ML-TR066 REVISED: ML-TR077

MANUFACTURER: GENERAL MOTORS CORPORATION	ENGINE FAMILY: TGM4.32PGKEL
	EVAPORATIVE FAMILY: TGM1089AYMBA
EXH STD: TIER-0 TIER-1 X TLEV	LEV ULEV ZEV; EPA TIER-0 TIER-1_X
VEH CLASS(ES): PC LDT1 LDT2_X	MDV1 MDV2 MDV3 MDV4 MDV5
SINGLE CERT STD FOR MULTI-CLASS ENGINE FA	
	SEL: 13 CCR 2282 OR 40 CFR 86.113-90
	NG LPG OTHER (SPECIFY)
FUEL TYPE(S): DEDICATED X FLEX-FUEL	
CNG LNG LPG OT	HER (SPECIFY)
HYBRID: TYPE A B C APU CYCL	E (E.G., OTTO, DIESEL, TURBINE): NA
ENGINE CONFIGURATION: V6 DISPL	ACEMENT: 4.3 LITERS 262 CUBIC INCHES
	DRIVE: FWD RWD_X_ 4WD-FT 4WD-PT
EXHAUST EMISSION CONTROL SYSTEM & COMPONE	NTS: LEGR, TWC, 2HO2S-HO2S(2), SFI
RLHP/DPA: SECTION 08.13.02.00	
(LOC) TRANS TYPE: E	QUIV. IGN SYSTEM EGR TEST (PCME/PROM) SYSTEM CATALYST VEIGHT PART NO./CALIB PART NO. PART NO.
ENG VEH MODELS A-AUTO CODE (SEE PAGE 1) M-MAN W	TEST (PCME/PROM) SYSTEM CATALTS! #FIGHT PART NO./CALIB PART NO. PART NO.
(NW)	
	4250 16237015PJ-OPER 17096309
	4750 16232339-ENG 16227582,
	16227583.
	16227586-TRANS
0,011	4250 16200785/
M11006	4750 1623915PG-OPER 16227517-ENG,
	16227582.
	16227583, 16227586-TRANS
_	CARLANE CORE
CARLINE NAME CHEV ASTRO EXTENDED PASSENGER VAN 2WD	CARLINE CODE 55060
CHEV ASTRO EXTENDED CARGO VAN 2WD	55045
GMC SAFARI XT EXTENDED CARGO VAN 2WD GMC SAFARI XT EXTENDED PASSENGER VAN 2WD	80035 80050

ISSUED: ML-TR066

REVISED:

MANUFACTURER: GENERAL MOTORS CORPORAT:	ION	ENGINE FAMILY	: TGM4.32P0	GKEL
EVAP STD: 50K_X_ USEFUL LIFE WITH RA				
EXH STD: TIER-0 TIER-1_X_ TLEV				
VEH CLASS(ES): PC LDT1 LDT2_)				
SINGLE CERT STD FOR MULTI-CLASS ENGINE				
EXH CERT FUEL(S): INDO PH2_X [DIESEL: 13 CO	CR 2282 OR	40 CFR 86.13	13-90
OR -94 M85				
FUEL TYPE(S): DEDICATED_X FLEX-FUEL	DUAL-FUI	EL GASOLI	NE <u>X</u> DIESI	EL M85
CNG LNG LPG				
HYBRID: TYPE A B C APU C				
ENGINE CONFIGURATION: V6 DIS				
ENGINE: FRONT X MID REAR				
EXHAUST EMISSION CONTROL SYSTEM & COMPO	ONENTS: LEGI	R, TWC, 2H02S-HC	J2S(2), SFI	
RLHP/DPA: SECTION 08.13.02.00				
(LOC) TRANS TYPE:	EQUIV.	IGN SYSTEM	EGR	CATALVET
ENG VEH MODELS A-AUTO CODE (SEE PAGE 1) M-MAN	TEST WEIGHT PA	(PCME/PROM) ART NO./CALIB	PART NO.	PART NO.
(NW)		6200785/		
.4M L11005 A4	1	6187577PB-OPER	17096309	20100004
		6187679-ENG 6187890.		
		6215601-TRANS		
4A . 4N	1	6200785/		
		6227245PF-OPER 6227410-ENG		
	1	6227560,		
	1	6227561-TRANS		
4B,4P		6235505PH-0PER 6232306-ENG		
	_			
6,6M		6200785/ 6232915PG-OPER		
	1	6227517-ENG		
	1	6227582. 6227583.		
		6227586-TRANS		
CARLINE NAME	<u>CAR</u>	LINE CODE		
CHEV ASTRO EXTENDED PASSENGER VAN AWD GMC SAFARI XT EXTENDED CARGO VAN AWD		55047 80037		
GOO CHARACT AT ENTERIORS CHRISTON		= =		

SSUED: ML-TP040 REVISED: ML-TP073, ML-TR004, ML-TR031, ML-TR053, ML-TR066

"ANUFACTURER: GENERAL MOTORS CORPORATION	ENGINE FAMILY: TGM4.32PGKEL
VAP STD: 50K_X_ USEFUL LIFE WITH R/L	EVAPORATIVE FAMILY: TGM1089AYMBA
EXH STD: TIER-0 TIER-1_X TLEV LEV	IN EV 7EV : EPA TIER-0 TIER-1_X
EXH SID: ITER-U ITER-I_X ILEV LLV	MDV3 MDV4 MDV5
VEH CLASS(ES): PC LDT1 LDT2_X MDV1_	NDV2 110V0 110V 1
SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY:	OR 40 CER 06 112 00
EXH CERT FUEL(S): INDO PH2_X DIESEL: 13	3 CCR 2282 UR 40 CFR 86.113-90
OR -94 M85 CNG _	LPGOTHER (SPECIFY)
FUEL TYPE(S): DEDICATED X FLEX-FUEL DUAL	-FUEL GASOLINE_X_ DIESEL M85
CNG ING LPG OTHER (S	PECIFY)
HYBRID: TYPE A B C APU CYCLE (E.G	OTTO. DIESEL, TURBINE): NA
ENGINE CONFIGURATION: V6 DISPLACEMEN	T: 4.3 LITERS 262 CUBIC INCHES
ENGINE: FRONT X MID REAR DRIV	F. FWD RWD X 4WD-FT 4WD-PT
ENGINE: FRUNI_X MIU REAK DRIV	LECT THE 2HO2S-HO2S(2) SET
EXHAUST EMISSION CONTROL SYSTEM & COMPONENTS:	LEUR, INC. ZHOZS HOZS(Z), S. I
RLHP/DPA: SECTION 08.13.02.00	
(LOC) TRANS TYPE: EQUIV.	IGN SYSTEM EGR (PCMF/PROM) SYSTEM CATALYST
FUO VELLMODELS A_ALLIO IFSI	(PUME/FROM) SISTEM SINCE IS
	1711(1 110.7 01.1222
2,4P L11005 A4 4500	16200785/ 17096188 25153034 16237105PJ-OPER
	16237103F3-0FEN 16232306-ENG
	16227582,
	16227583-TRANS
AD AD	16232388-ENG
4D.4R	
·	CADI THE CODE
CARLINE NAME	CARLINE CODE 55047
CHEV ASTRO EXTENDED PASSENGER VAN AWD	80037

ISSUED: ML-TR066 REVISED: ML-TR077